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GOVERNMENT PUBLICATIONS

1975 INSPECTIONS OF

MAY 21 1976

FERTILIZER NIVERSITY OF CONNECTICUT

PESTICIDE

AND FEED

PRODUCTS

J. Gordon Hanna



1975 Inspections of Fertilizer, Pesticide and Feed Products

Data obtained by chemical analysis of officially collected samples of commercial feeds, fertilizers and pesticide formulations are contained in this report. The tables show the number of samples from each manufacturer (in parenthesis), the number of determinations made for each guaranteed ingredient, the number of deficiencies, and the average percent of claims for each component.

The deficiencies noted for feed samples are based on tolerances of 0.75% for protein and fiber and 0.25% for fat. The investigational allowances for fertilizers are those of the Association of American Plant Food Control Officials, and the permissive guarantee variations suggested by the Association of American Pesticide Control Officials are used for pesticide formulations.

Data for 681 samples of feed representing 69 manufacturers, 376 samples of fertilizer representing 54 manufacturers and 252 samples of pesticide representing 52 manufacturers are summarized.

The feed and fertilizer laws are administered by the Commissioner of Agriculture. The pesticide law is under the direction of the Commissioner of Environmental Protection.

Analytical work was by R. Botsford, M. Fuzesi, W. Glowa, H. Kocaba, R. Smith, S. Squires and G. Wilmes. The report was assembled and typed by A. Ballou.

J. Gordon Hanna, Chief Chemist May 1976

F 1	Num	ber o	f Claim	ı <u>s</u>	Numbe	r Not	Met	Average	% of	Claims
Feed Manufacturer	Protein	Fat	Fiber	Total	Protein	Fat	Fiber	Protein	Fat	Fiber
Agway (62) Albers Milling (3) Allen Products (9) Allied Mills (26) American Crystal Sugar (1) Armour-Dial (2)	61 3 9 26 1 2	61 3 9 26 1 2	61 3 9 26 1 2	183 9 27 78 3 6	1 0 0 0 0	0 0 1 1 0 0	0 0 0 0 0	110 104 115 111 120 115	139 156 141 133 180 197	72 65 73 67 81 77
Barber and Bennett (3) Best Feeds	3	3	3	9	0	0	0	103	120	79
and Farm Supplies (2) Blue Seal Mill (4) Borden (1) Brockville Chemical (1) Bumble Bee Sea Foods (2) Cadillac Pet Foods (9) Calo Pet Foods (1) Carnation (32) Central Connecticut	2 4 1 1 2 9 1 32	2 4 1 0 2 9 1 32	2 4 0 0 2 9 1 32	6 12 2 1 6 27 3 96	1 0 0 0 0 0 0 0	0 1 0 - 0 0 0	0 0 - 0 0 0	107 101 108 100 123 111 101	152 135 104 - 125 158 152 152	54 74 - 30 74 40 45
Co-op Farmers (32) Champion Valley Farms (5) Charbone (1) Coca Cola (1)	32 5 1 1	32 5 1 1	32 5 1 1	96 15 3 3	1 0 0 0	0 0 0 0	0 0 0 0	107 122 100 119	132 166 130 174	80 67 113 51
Jim Dandy (1) Derby Feed (2)	1 2	1 2	1 2	3 6	0 1	0	0	109 93	289 135	49 57
8 in 1 Pet Products (6) John W. Eschelman & Sons	6 36	6 36	6 36	18 108	1 0	0	0	118 112	149 146	76 67
Farines Phenix (1) Farm Bureau (15) First National Stores (17) R. T. French (1)	1 14 17 1	1 14 17 1	1 14 17 1	3 42 51 3	0 2 1 0	0 1 3 0	0 0 0 0	107 101 107 137	127 121 132 173	71 75 68 25
Geissler Pet Products (3) General Foods (15) Grand Union (19) Great A & P (18)	3 15 19 18	3 15 19 18	3 15 19 18	9 45 57 54	0 0 1 0	1 1 1 0	0 0 3 0	106 117 108 111	130 149 148 158	84 73 94 70
Hartz Mountain (9) E.C. & W.L. Hopkins (15)	9 14	9 14	9 1 4	27 42	0 0	2 0	0	115 105	141 134	73 66
Kal Kan Foods (6) K & L Feeds (3)	6 3	6 3	6 3	18 9	0 0	0	0	115 109	107 103	37 88
Lipton Pet Foods (3) Liv-A-Snaps (1)	3 1	3 1	3 1	9 3	0 0	0	0	119 122	103 126	62 24
Long Life Aquarium Products (2)	2	2	2	6	0	0	0	108	324	44
Maple Leaf Mills (2) Movar Shrimp and Oyster (1) Milk Specialties (1)	2 1 1	2 1 1	2 1 1	6 3 3	0 0 0	$\begin{matrix} 0 \\ 1 \\ 0 \end{matrix}$	0 0 0	106 115 110	161 75 149	93 50 100
Nabisco (7) National Alfalfa	7	7	7	21	0	0	0	111	137	54
Dehydrating and Milling (1 National Pet Food (9) New England Fish (1) L. M. Newfields (1)	1 9 1 1	1 9 1 1	1 9 1 1	3 27 3 3	0 1 0 0	0 1 0 0	0 0 0 0	103 106 125 112	309 124 135 88	98 76 40 84
Old Fox (1) Old Mother Hubbard (2)	$\frac{1}{2}$	1 2	1 2	3 6	0	0	0	109 121	340 220	46 45

Feed	Num	ber o	f Claim	ıs	Numbe	r Not	Met	Average	% of	Claims
Manufacturer	Protein	Fat	Fiber	Total	Protein	Fat	Fiber	Protein	Fat	Fiber
Perk Foods (3) Pet Kitchens (1)	3 1	3 1	3 1	9 3	0	0	0	111 125	187 181	91 110
Quaker Oats (13)	13	13	13	39	0	1	0	117	160	84
Ralston Purina (73) Redi Div. Thermova Inds. (1 Red Rose (25) Rytman (10)	73 1 25 10	73 1 25 10	73 1 25 10	219 3 75 30	0 0 0	0 0 0 0	0 1 0 0	108 141 109 107	156 1030 143 119	58 225 71 88
Shelabars (1) Spangler's Flour Mills (2) Starkist Foods (19) Stop & Shop (12) Strongheart Products (3) Supermarkets General (25)	1 2 19 12 3 25	1 2 19 12 3 25	1 2 19 12 3 25	3 6 57 36 9 75	0 0 1 1 0	0 0 1 2 1 3	0 0 0 0 0 0	111 108 106 106 106 110	99 144 189 124 138 152	67 62 39 53 91 124
Tetra Werke (2) Topco Associates (5) Triumph Pet Food (1)	2 5 1	2 5 1	2 5 1	6 15 3	0 0 0	0 0 0	0 0 0	110 112 105	164 142 110	31 48 53
United Co-op Farmers (14)	14	14	14	42	2	0	0	104	129	71
Wakefern Food (13) Wardley Products (5) Wm Warren & Son (2) H. K. Webster (55)	13 5 2 55	13 5 2 55	13 5 2 55	39 15 6 165	1 1 0 0	1 0 0 0	0 0 0 0	105 103 102 108	130 316 118 135	78 50 98 74
(681)	678	677	676	2031	16	23	8	109	147	70

Percent of claims deficient: 2.3

	Numbe	P ₂ 0 ₅ +		Number	Not Met	Average %	of Claims
Fertilizer Manufacturer	N	т2°5' К ₂ 0	Total	N	P ₂ O ₅ + K ₂ O	N	P ₂ O ₅ + K ₂ O
Agrico Chemical (17) Agricultural Products (1) Agway (46) Atlas Fish Fertilizer (1)	15 1 44 1	32 2 78 2	47 3 122 3	2 0 0 0	13 0 13 0	113.1 111.5 106.3 97.2	96.2 108.6 106.3 116.5
Black Leaf Products (1)	1	2	3	0	0	111.0	108.0
Cadwell and Jones (11) Chevron (6) Chilean Nitrate Sales (2) Clinton Nursery (4) Continental Peat (1) Corenco (16)	10 6 2 4 1 15	20 12 0 8 2 29	30 18 2 12 3 44	2 0 0 0 0	5 0 - 1 0 4	102.3 112.8 99.0 111.5 105.6 104.9	101.1 111.9 - 105.1 110.0 107.7
The Dram Co. (1) DuPont (1)	1 1	2	3 1	0	0	110.9 101.1	146.2
Farmingdale Garden Labs (1) Fer-Mel (5)	1 5	2 8	3 13	0	1 1	107.3 104.0	83.5 99.2
Great A & P (3) Green Thumb (1)	3 1	6 2	9	0	1 0	105.2 109.2	107.7 107.2
Charles C. Hart Seed (6) H Bar M (1) Hercules (1) Heritage House (4) A.H. Hoffman (2) Hytrous (2) Hydroponics (2)	6 1 1 4 2 2 2	12 2 0 8 4 4 4	18 3 1 12 6 6 6	0 0 0 0 0 1	0 0 - 0 1 0 0	115.3 140.0 98.9 117.9 106.0 97.6 109.9	116.2 140.0 - 104.9 101.3 184.7 108.0
International Spike (1)	1	2	3	0	0	100.8	148.5
Judd Ringer (2)	2	4	6	0	0	116.6	118.1
Kerr McGee (84) Koos (5)	76 5	165 10	241 15	16 0	38 4	101.3 135.5	104.6 120.9
Lebanon (8) Leisure Group (1) Luzerne (4)	8 1 4	16 2 8	24 3 12	3 0 0	2 0 1	109.5 110.0 100.6	115.6 102.4 109.0
3M (2) Wilson & George Meyer (2)	2 2	4 0	6 2	0	0	105.7 99.1	101.8
Nassau Gardens (9)	9	18	27	0	0	117.6	121.8
Old Fox (41)	38	77	115	15	29	121.2	105.1
Robert B. Peters (2) Plantabbs (3) Plant Marvel (1) Plant Products (1) Premier Peat Moss (2)	2 3 1 1 2	4 6 2 2 4	6 9 3 3 6	0 0 0 0	0 0 0 0	104.0 113.8 118.0 102.4 109.6	105.8 117.3 106.2 101.4 127.5
Ra-Pid Gro (1) Rockland Chemical (1) Ross Daniels (1)	1 1 1	2 2 2	3 3 3	0 0 0	0 0 1	100.0 116.2 126.4	106.8 129.5 99.0

		Number	r of C	laims	Numbe	r Not Met	Average %	of Claims
Ferti	lizer		P ₂ 0 ₅ +			P ₂ 0 ₅ +		P205+
Manufa	cturer	N	K ₂ 0	Total	N	K ₂ 0	N	к ₂ 0
S & D Products (1)		1	2	3	0	0	121.3	116,3
Schultz Co. (1)		ī	2	3	Ö	î	118.2	94.5
0. M. Scott (7)		7	14	21	0	2	103.4	103.4
Sears (6)		6	12	18	0	1	118.4	107.9
Sewerage Commission of Milwaukee (1)		1	1	2	0	0	108.0	98.0
Sterns Nurseries (5)		5	10	15	Ő	ő	105.6	104.6
Stim U Plant (1)		1	2	3	0	1	95.2	94.1
Sudbury (1)		1	0	1	0	-	102.9	-
Swift Chemical (12)		12	24	36	4	4	102.2	115.8
Swiss Farms (3)		3	6	9	0	0	133.0	108.3
Vigoro (6)		6	12	18	1	1	105.1	134.5
	(351)	334	656	990	45	125	108.6	108.2

Percent of claims deficient: 17.2

Mixed Fertilizer Distribution July 1, 1974 - June 30, 1975

Grade	Tons
0-15-30	306
5-10-5	801
5-10-10	3,759
10-6-4	2,235
10-10-10	6,915
10-20-10	693
10-20-20	563
15-15-15	458
15-30-15	47
20-4-10	54
20-10-5	208
20-20-20	32
23-7-7	2,429
30-10-10	24
Miscellaneous*	19,587
Total	38,111

^{*}Small amounts or reported by fewer than three manufacturers

Secondary and Minor Elements

М	anufacturer	Element Claimed	Number Of Claims	Number Not Met	Average % Of Claims
Agrico (1)		Magnesium	1	0	396
Agway (4)		Boron Magnesium Zinc	2 4 1	0 0 1	100 132 55
Chilean Nitrate	(1)	Sodium	1	0	101
Corenco (2)		Magnesium	2	0	117
Charles C. Hart	Seed (1)	Magnesium	1	0	217
Kerr McGee (10)		Calcium Magnesium	1 9	0 1	98 124
Lebanon (1)		Iron	1	0	1565
Nassau Gardens (1)	Boron Calcium Copper Iron Manganese Sulfur Zinc	1 1 1 1 1 1	0 0 0 0 0 0	250 250 130 300 126 100
01d Fox (3)		Magnesium	3	0	421
Sears (1)		Boron Copper Iron Magnesium Manganise Zinc	1 1 1 1 1	1 0 0 0 0	55 54 180 333 140 100
	(25)	39	4	204

Percent of claims deficient: 10.3

Tonnages of Fertilizer Materials and Mixed Fertilizers Purchased During the Period of July 1, 1974 - June 30, 1975

Chemical Nitrogen

Total 58,539

Ammonium nitrate Ammonium sulfate Calcium nitrate Nitrate of soda Urea Urea-form	1,940 4 25 23 3,426 21 5,439
Organics	
Castor pomace Cottonseed meal Dried blood Fish emulsion Dried manures Sewage sludge Tankage	30 6 6 52 3,803 1,065 18 4,980
Phosphates	
Ammonium phosphate Bonemeal Diammonium phosphate Superphosphate 20% Superphosphate 40%	1,117 41 1 180 730 2,069
Potash	
Muriate of potash Nitrate of potash Nitrate of soda-potash Sulfate of potash-magnesia	2,568 1 1 38 2,608
Secondary and micronutrients	
Boron Iron Sulfur	$ \begin{array}{r} 15 \\ 1 \\ 12 \\ \hline 28 \end{array} $
Mixed fertilizers	
Commercial mixtures Special mixtures for tobacco	$ \begin{array}{r} 38,111 \\ 5,304 \\ \hline 43,415 \end{array} $

Pesticide Manufacturer	Pesticide	Number Of Claims	Number Not Met	Average % Of Claims
Acme Insecticide Division Sherwin Williams Co. (1)	Zineb	1	0	99
Agricultural Products Co. (5)	Captan Carbaryl Chlordane Malathion Methoxychlor Sulfur Zineb	2 1 2 2 1 1 1	1 0 0 0 0 0	89 101 105 101 100 100
Agway, Inc. (13)	Ammonium sulfamate Captan Carbaryl Chlordane Ethion Folpet Kelthane Malathion Meta-Systox R Methoxychlor Prometone Pyrethrins Resmethrin Rotenone	1 2 2 1 1 1 2 3 1 3 1 1 1	0 0 0 0 0 0 0 0 2 0 0 0	101 99 102 98 115 99 106 92 133 98 104 101 Present
Amchem Products, Inc. (3)	Amiben Amitrol	1 2	0 0	108 102
Black Leaf Products Co. (27)	Captan Carbaryl Chlordane 2,4-D Dacthal Diazinon Dicamba Karathane Kelthane Lindane Malathion Maneb Maneb & Zineb Methoxychlor	3 6 5 1 1 1 1 1 2 1 2	1 0 0 0 0 0 0 0 0 0 0	80 103 99 106 98 101 99 96 100 100 96 102 100 98
	Octylammonium methanearsonate Pentachlorophenol Pyrethrins Rotenone Silvex	1 1 4 1	0 0 0 0	98 103 99 98 105
Bonide Chemical Co. (25)	Ammonium sulfamate Benomyl Captan Carbaryl Chlordane Copper Diazinon Eptam Folpet Karathane Kelthane Lindane Malathion Maneb Methoxychlor Rotenone Ryanodine alkaloid	1 1 2 12 3 2 1 1 2 1 2 1 3 1 2 1 3 1 2 1 1 2 1 2	0 0 0 0 0 0 0 0 0 0 0	101 100 101 100 103 97 100 101 98 100 100 100 101 108 105 110

Pesticide Manufacturer	Pesticide	Number Of Claims	Number Not Met	Average % Of Claims
Boyle-Midway, Inc (7)	DDVP	3	0	101
	N,N-Diethyl-m- toluamide	1	0	95
	Pyrethrins Resmethrin	2 1	0	103 Present
Chase Product Co. (1)	Sodium arsenate	1	0	115
Chevron Chemical Co. (27)	Captan	3	0	109
	Carbaryl Chlordane	4 3	0	102 103
	Copper	1	1	60
	2,4-D 2,4-D + diethanolamin	2 ie	0	99
	salt of propionic aci Diazinon		0	109 120
	Dodecylammonium	2	O	
	methanearsonate Folpet	1 2	0	105 102
	Kelthane	1	0	103
	Lindane Malathion	1 2	0	101 101
	Mesurol	1	0	119
	Metaldehyde Methoxychlor	1 2	0	102 100
	Paraquat	1	0	109
	Polysulfides Pyrethrins	1 2	0	100 104
	Resmethrin	1	0	Present
	Rotenone Silvex	3 3	0	116 103
	Sulfur	1	0	101
Ciba-Geigy Corp. (8)	Diazinon	5	1	98
	Folpet Methoxychlor	1 1	0	100 96
	Pyrethrins	3	Ö	99
Combe, Inc. (1)	Carbaryl	1	0	100
, , , ,	Pyrethrins	1	0	100
The de-Con Co. (4)	d-trans-Allethrins	2	0	105
	Methoxychlor Warfarin	$\frac{1}{1}$	0 0	98 102
DeMert and Dougherty, Inc. (1)	N,N-diethyl-meta- toluamide	1	0	106
Elanco Products Co. (3)	Captan	1	0	108
ETANCO FIORDECES Co. (3)	2,4-D	1	0	99
	Malathion Methoxychlor	1 2	0	99 98
Encap Products Corp. (1)	Mesurol	1	0	116
Faesy and Besthoff, Inc. (1)	Carbaryl	1	0	101
Farmingdale Garden Laboratories (4)	Carbaryl	1	0	102
	Chlordane	2 1	0	98 99
	Copper Rotenone	i	ő	107

Pesticide Manufacturer	Pesticide	Number Of Claims	Number Not Met	Average % Of Claims
W. T. Grant Co. (2)	Carbaryl Chlordane Maneb	1 1 1	1 0 1	60 103 0
The Great Atlantic & Pacific Tea Co. (2)	Pyrethrins Resmethrin	1 1	0 0	102 Present
Heritage House Products (1)	Carbaryl Daconil Karathane	1 1 1	0 0 0	96 101 94
Gaston Johnston Corp. (1)	Diazinon Malathion	1 1	0 0	97 110
S. C. Johnson and Son, Inc. (10)	d-trans-Allethrins DDVP N,N-diethyl-meta-	1 1	0 0	100 97
	toluamide Perthane Pyrethrins Tetramethrin	4 1 2 1	0 0 0 0	104 100 93 114
Lethelin Products Co. (1)	Lindane	1	0	98
Miller-Morton Co. (3)	Carbaryl Pyrethrins	1 2	0	103 96
Nippon Kado, Inc. (1)	Allethrin Pyrethrin	1 1	0	101 Present
Nott Manufacturing Co. (2)	Lindane Silvex	1 1	0	98 99
The Nu-Method Pest Control Service (1)	Diazinon Pyrethrins	$\frac{1}{1}$	0 1	96 46
John Opits, Inc. (1)	Pyrethrins	1	0	100
The Parrott Chemical Co. (6)	Carbaryl Chlordane Copper Diazinon Kelthane Maneb Pyrethrins Rotenone Sulfur	2 2 1 1 1 1 2 1	0 0 0 0 0 1 0 0	102 106 101 96 87 63 96 94 105
Pennwalt Corp. (1)	Endothol	1	0	101
Plantabbs Corp. (1)	Malathion Pyrethrins Rotenone	1 1 1	0 0 0	113 91 100
B. G. Pratt Division (25)	Captan Carbaryl Chlordane Copper Diazinon Folpet Kelthane Lindane Maneb	1 4 3 1 2 1 5 2 2	0 0 0 0 0 0 0	97 103 103 100 100 92 107 99 82

Pesticide Manufacturer	Pesticide	Number Of Claims	Number Not Met	Average % Of Claims
B. G. Pratt Division (25)	Malathion Methylnonyl ketone Methoxychlor Pyrethrins Resmethrin Rotenone Sulfur	3 1 4 5 1 3 2	2 0 0 0 0 0	87 105 99 98 Present 98 103
Pulvex Div., Cooper USA (2)	Captan Carbaryl Lindane Malathion	1 1 1	1 0 0 1	43 108 95 61
Ralston Purina Co. (8)	Captan Carbaryl Chlordane Diazinon Dimethoate Karathane Malathion Pival Zineb	1 3 1 1 1 1 2 1 3	1 0 0 0 0 0 0 1 0	76 101 104 102 103 99 80 102
Realex Corp. (2)	Diazinon Pyrethrins Resmethrin	1 2 1	0 0 0	112 106 Present
Rexall Drug Co. (2)	Pyrethrins Resmethrin	1 1	0 0	102 Present
Rite-Off Corporation (1)	Tetramethrin	1	0	96
Rockalnd Chemical Co. (4)	Ammonium sulfamate Ferbam Pyrethrins Rotenone	1 1 2 1	0 0 0 0	99 99 1071 94
Ross Daniels, Inc. (1)	Chlordane	1	0	98
Science Products Co. (5)	Carbaryl Kelthane Malathion Maneb Zineb	1 2 1 1	1 0 0 0 0	74 107 97 97 107
O. M. Scott & Sons, Inc. (1)	Trifluralin	1	0	100
Seacoast Laboratories, Inc. (11)	Carbaryl Chlordane Diazinon Kelthane Malathion Methoxychlor Pyrethrins Rotenone Zineb	3 1 1 1 1 2 3 1	0 0 0 0 0 0 0 1 0	102 102 97 106 103 100 53 103 111
Sears Roebuck & Co. (8)	Carbaryl Chlordane Copper 2,4-D _ Dicamba Methanearsonate Methylnonyl ketone Pyrethrins Rotenone	3 1 1 1 1 1 2	0 0 0 0 0 0	101 103 87 108 101 97 99

Pesticide Manufacturer	Pesticide	Number Of Claims	Number Not Met	Average % Of Claims
Senoret Chemical Co. (1)	Sodium arsenate	1	0	106
Shell Chemical Co. (3)	Allethrin Chlorpyrifos Methoxychlor Vapona	1 1 1 1	0 0 0 0	120 112 100 100
Sherwin Williams Co. (1)	Allethrin	1	0	100
Swift Chemical Corp. (3)	Carbaryl Maneb Rotenone Sulfur Zineb	2 1 1 1 1	0 0 0 0	103 114 109 105 105
Thuron Industries, Inc. (1)	Vapona	1	0	103
Union Carbide Corp. (3)	N,N-diethyl-meta- toluamide	1	0	98
Walgren Laboratories, Inc. (2)	Diazinon Pyrethrins	1 1	0	112 96
Whitmire Research Lab. Inc. (1)	Pyrethrins	1	0	103
F. W. Woolworth (2)	Malathion Methoxychlor	1 1	0	97 96
(252)		361	19	105

Percent of claims deficient: 5.3



THE CONNECTICUT

AGRICULTURAL EXPERIMENT STATION

NEW HAVEN, CONNECTICUT 06504

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